

### **Abstract**

An apparatus for locking the wavelength of a laser uses a non-planar etalon, for example a non-parallel etalon, to produce a periodic spatial interference pattern, typically in the light reflected from the etalon. The  
5 apparatus also uses a detector to detect the spatial interference pattern having at least three separate detector elements, commonly referred to as pixels. The etalon and the detector are matched to each other so that adjacent pixels detect a specific portion of the phase of the periodic interference pattern.

10014278-121101  
FOI27-8247001